Research and development of Chinese medicines (Zhong-Yao)

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Since the research and development of new chemical drugs remain time-consuming, capital-intensive and risky, much effort has been put in the search for alternative routes for drug discovery in China. In this communication, the author will present various approaches to the research and drug discovery in Chinese medicines (Zhong-Yao), including 1) reform of dosage forms, 2) reform of traditional formulae, 3) bioactive fractions extracted from Chinese medicinal herbs, 4) bioactive compounds isolated from Chinese medicinal herbs, 5) optimization of lead compounds isolated from Chinese medicinal herbs, 6) identification of new compound(s) generated from herb-herb interaction during decoction process of multi-component herbal formulae, 7) identification of herbal metabolites following the administration of a multi-component herbal formula into a living organism, 8) combination of Chinese medicinal herbs and Western drug(s), and 9) covalent linkage of Chinese medicinal herbal compound with chemical drug. Zhong-Yao has evolved over the millennia, with a battery of herbal materials to preserve health, to treat and prevent illnesses. Therefore, it is believed that if researches on Zhong-Yao-derived drug are conducted using contemporary methodologies and biomarkers, they will produce great impact on the mainstream biomedical science and likely bring about an era of modern medicine.

Biography

Zhi-Ling Yu obtained a Bachelor degree of Pharmacy in Chinese Medicine from Henan College of Chinese Medicine, Zhengzhou, China and a PhD degree in Biochemistry from Hong Kong University of Science and Technology, Hong Kong. Currently, he is studying anticancer, anti-inflammation and anti-fatty liver effects of Chinese herbs using molecular biology approaches in Hong Kong Baptist University as an Associate Professor.

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